Serial Number: 09/944,993

Filing Date: August 30, 2001

Title: BIT INVERSION IN MEMORY DEVICES

Page 10 Dkt: 703.155US1

## **REMARKS**

This paper responds to the Office Action mailed on November 18, 2005.

Claims 1, 7, 11, 13, 17, 21, 25, 28, 33, and 40 are amended; as a result, claims 1-46 are now pending in this application. The amendments are consistent with prior arguments of the Applicant and are made for purposes of placing the claims in condition for allowance. Therefore, Applicant believes entry of the amendments is appropriate and respectfully requests an indication of the same from the Examiner.

## §102 Rejection of the Claims

Claims 1-5, 7-9, 13-18, 21, 23, and 25-27 were rejected under 35 U.S.C. § 102(e) for anticipation by de la Iglesia et al. (U.S. 6,490,703). It is of course fundamental that in order to sustain an anticipation rejection that each and every step or element in the rejected claims must be taught or suggested in the cited reference.

Fundamentally, de la Iglesia is directed to splitting a word of data into multiple segments within a device by splitting the word on a data bus. Each split portion of the word includes its own inversion flag. Thus, if a word is split four times then four bits are reserved for inversion detection. The device forgoes some error correction capabilities in order to perform inversion, since multiple bits are used to determine inversion. Moreover, the device must be rebooted before split word inversion is capable of being processed within the device. *E.g.*, de la Iglesia, col. 8, lines 1-8, *etc*.

The entire technique of de la Iglesia is reserved for a particular device, such as a computer. Moreover, the technique describes how to configure a computer to begin using inversion capabilities, where such a configuration necessitates the computer be rebooted.

What de la Iglesia lacks is any teaching or suggestion of a teaching where inversion occurs from a data stream that is being received from an external data source. That is, a data source that is external to the computer. In fact, de la Iglesia relies on the data within memory of the computer to perform its techniques and restructuring of data storage. There is no teaching or ability in de la Iglesia for the data stream being inverted to be communicated from an external data source. Thus, the techniques of de la Iglesia are self contained within a single device and

BIT INVERSION IN MEMORY DEVICES

Page 11 Dkt: 703.155US1

explain an approach for internal memory management of that device. Conversely, Applicant's amended independent claims now recite data streams received from external data sources; meaning the data is not just being reformatted internally within memory of a specific device as is the case with de la Iglesia.

Accordingly, Applicant respectfully asserts that de la Iglesia fails to teach each and every element and step of Applicant's amended claims, since there is no teaching or suggestion of a teaching where the data being inverted or that is already inverted is received or acquired from an external data source. Therefore, the rejections with respect to de la Iglesia should be withdrawn and the claims allowed. Applicant respectfully requests an indication of the same.

Claims 1-7, 9-12, 19-22, 24-26, 28-37, 39-41, and 44-46 were rejected under 35 U.S.C. § 102(e) for anticipation by Norman (U.S. 5,873,112). Again, anticipation requires each and every step or element in the rejected claims be taught or suggested in the cited reference.

Again and similar to the discussion of de la Iglesia, with Norman the data source resides within the memory chip. Conversely, the data stream is directly received from an external data source. The Examiner has recited memory chip 3 as the data source and this is not external but a part of the process described in Norman. Consequently, Norman fails to teach or suggest each and every limitation of Applicant's amended independent claims and Applicant respectfully request that the rejections be withdrawn and the claims in question allowed.

## §103 Rejection of the Claims

Claims 38, 42, and 43 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Norman in view of Goldstein (U.S. 2003/0028672). Claim 38 is dependent from independent claim 33 and claims 42-43 are dependent from independent claim 40; therefore, for the remarks presented above with respect to claims 33 and 40, the rejections of claims 38 and 42-43 should be withdrawn and these claims allowed. Applicant respectfully requests an indication of the same.

Page 12 Dkt: 703.155US1

Serial Number: 09/944,993 Filing Date: August 30, 2001

Title: BIT INVERSION IN MEMORY DEVICES

## **CONCLUSION**

Applicant further incorporates all prior response by reference to preserve all issues for appeal. The above remarks are directed to further distinctions and the prior responses are not restated for clarity.

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney (612) 349-9587 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop AF, Commissioner of Patents, P.O. Box 1450,

Alexandria, VA 22313-1450, on this \ \ day of January, 200

Name

Signature